

**Massachusetts Department of Public Health
Bureau of Infectious Disease Prevention, Response and Services
Office of Integrated Surveillance and Informatics Services**

Confirmed Pertussis Case Counts by Age Group and Year in Massachusetts: 2000-2010*

*These data are current as of 11/16/2011 and are subject to change.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<1 year	52	13	22	41	71	48	61	81	50	38	24
1-10 years	53	21	32	62	67	66	92	194	132	51	62
11-19 years	872	339	380	1080	932	568	594	446	221	76	73
20-29 years	76	37	59	93	145	76	88	81	61	18	24
30-39 years	99	55	32	113	149	111	99	98	65	52	26
40-49 years	147	59	49	159	221	158	142	170	110	62	44
50-59 years	49	20	33	73	102	99	79	81	79	40	18
60-69 years	18	8	8	36	29	37	25	29	26	17	18
70-79 years	11	3	5	16	13	14	12	10	15	7	6
>=80 years	5	1	4	4	6	6	8	8	3	1	1
Unk years	0	0	0	0	0	0	1	0	0	0	0
Total	1382	556	624	1677	1735	1183	1201	1198	762	362	296

**Massachusetts' Confirmed Pertussis Incidence Rates (per 100,000 population^) by Age Group and Year:
2000-2010***

^Based on 2000 Census data.

*These data are current as of 11/16/2011 and are subject to change.

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<1 year	77,998	66.7	16.7	28.2	52.6	91.0	61.5	78.2	103.8	64.1	48.7	30.8
1-10 years	840,837	6.3	2.5	3.8	7.4	8.0	7.8	10.9	23.1	15.7	6.1	7.4
11-19 years	756,278	115.3	44.8	50.2	142.8	123.2	75.1	78.5	59.0	29.2	10.0	9.7
20-29 years	838,303	9.1	4.4	7.0	11.1	17.3	9.1	10.5	9.7	7.3	2.1	2.9
30-39 years	1,033,357	9.6	5.3	3.1	10.9	14.4	10.7	9.6	9.5	6.3	5.0	2.5
40-49 years	984,347	14.9	6.0	5.0	16.2	22.5	16.1	14.4	17.3	11.2	6.3	4.5
50-59 years	721,410	6.8	2.8	4.6	10.1	14.1	13.7	11.0	11.2	11.0	5.5	2.5
60-69 years	452,903	4.0	1.8	1.8	7.9	6.4	8.2	5.5	6.4	5.7	3.8	4.0
70-79 years	396,273	2.8	0.8	1.3	4.0	3.3	3.5	3.0	2.5	3.8	1.8	1.5
>=80 years	247,391	2.0	0.4	1.6	1.6	2.4	2.4	3.2	3.2	1.2	0.4	0.4
Total	6,349,097	21.8	8.8	9.8	26.4	27.3	18.6	18.9	18.9	12.0	5.7	4.7

**Massachusetts Department of Public Health
Bureau of Infectious Disease Prevention, Response and Services
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Confirmed Pertussis Case Counts by Massachusetts County: 2000-2010*

*These data are current as of 11/16/2011 and are subject to change.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Berkshire County	1	1	2	75	47	10	7	9	32	1	21
Bristol County	81	18	48	160	180	95	86	90	43	26	11
Cape Cod Counties (Barnstable, Dukes, Nantucket)	17	10	22	22	30	33	50	18	34	12	5
Essex County	120	50	43	224	138	95	112	127	55	42	34
Franklin County	16	9	15	19	28	14	20	30	9	9	5
Hampden County	76	134	81	110	61	77	131	96	42	27	15
Hampshire County	94	58	30	62	57	39	46	60	48	16	24
Middlesex County	391	116	146	407	458	358	337	293	178	92	88
Norfolk County	203	42	70	248	220	173	115	137	82	25	35
Plymouth County	162	36	97	106	148	83	114	85	72	23	15
Suffolk County	75	30	35	165	124	107	101	164	59	28	29
Unknown County	0	0	0	10	0	0	0	9	1	0	0
Worcester County	146	52	35	69	244	99	82	80	107	61	14
Massachusetts Total	1,382	556	624	1,677	1,735	1,183	1,201	1,198	762	362	296

Confirmed Pertussis Incidence Rates (per 100,000 population^) by Massachusetts County: 2000-2010*

*These data are current as of 11/16/2011 and are subject to change.

^Based on 2000 Census data.

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Berkshire County	134,953	0.7	0.7	1.5	55.6	34.8	7.4	5.2	6.7	23.7	0.7	15.6
Bristol County	534,678	15.1	3.4	9.0	29.9	33.7	17.8	16.1	16.8	8.0	4.9	2.1
Cape Cod Counties (Barnstable, Dukes, Nantucket)	246,737	6.9	4.1	8.9	8.9	12.2	13.4	20.3	7.3	13.8	4.9	2.0
Essex County	723,419	16.6	6.9	5.9	31.0	19.1	13.1	15.5	17.6	7.6	5.8	4.7
Franklin County	71,535	22.4	12.6	21.0	26.6	39.1	19.6	28.0	41.9	12.6	12.6	7.0
Hampden County	456,228	16.7	29.4	17.8	24.1	13.4	16.9	28.7	21.0	9.2	5.9	3.3
Hampshire County	152,251	61.7	38.1	19.7	40.7	37.4	25.6	30.2	39.4	31.5	10.5	15.8
Middlesex County	1,465,396	26.7	7.9	10.0	27.8	31.3	24.4	23.0	20.0	12.1	6.3	6.0
Norfolk County	650,308	31.2	6.5	10.8	38.1	33.8	26.6	17.7	21.1	12.6	3.8	5.4
Plymouth County	472,822	34.3	7.6	20.5	22.4	31.3	17.6	24.1	18.0	15.2	4.9	3.2
Suffolk County	689,807	10.9	4.3	5.1	23.9	18.0	15.5	14.6	23.8	8.6	4.1	4.2
Worcester County	750,963	19.4	6.9	4.7	9.2	32.5	13.2	10.9	10.7	14.2	8.1	1.9
Massachusetts Total	6,349,097	21.8	8.8	9.8	26.4	27.3	18.6	18.9	18.9	12.0	5.7	4.7

**Massachusetts Department of Public Health
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**Confirmed Pertussis Case Counts by Diagnostic Method, Age Group and Year in Massachusetts:
2000-2010***

*These data are current as of 11/16/2011 and are subject to change.

2000					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	47	5	0	0	52
1-10 years	33	18	0	2	53
11-19 years	125	24	3	720	872
20-29 years	4	2	0	70	76
30-39 years	4	2	0	93	99
40-49 years	4	4	1	138	147
50-59 years	2	0	0	47	49
60-69 years	1	0	0	17	18
70-79 years	1	1	0	9	11
>=80 years	1	0	0	4	5
Total	222	56	4	1100	1382

2001					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	13	0	0	0	13
1-10 years	9	11	0	1	21
11-19 years	32	8	1	298	339
20-29 years	5	0	0	32	37
30-39 years	2	1	1	51	55
40-49 years	1	2	1	55	59
50-59 years	1	1	0	18	20
60-69 years	0	0	0	8	8
70-79 years	0	0	0	3	3
>=80 years	0	0	0	1	1
Total	63	23	3	467	556

2002					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	18	3	1	0	22
1-10 years	11	18	0	3	32
11-19 years	47	23	4	306	380
20-29 years	8	3	1	47	59
30-39 years	2	3	1	26	32
40-49 years	3	7	1	38	49
50-59 years	1	1	0	31	33
60-69 years	1	0	0	7	8
70-79 years	0	0	0	5	5
>=80 years	1	0	0	3	4
Total	92	58	8	466	624

2003					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	32	7	2	0	41
1-10 years	35	22	1	4	62
11-19 years	131	35	3	911	1080
20-29 years	4	5	0	84	93
30-39 years	1	10	0	102	113
40-49 years	4	18	0	137	159
50-59 years	2	5	0	66	73
60-69 years	1	1	0	34	36
70-79 years	2	1	0	13	16
>=80 years	1	0	0	3	4
Total	213	104	6	1354	1677

2004					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	65	2	4	0	71
1-10 years	45	18	1	3	67
11-19 years	156	12	3	761	932
20-29 years	19	3	0	123	145
30-39 years	10	4	1	134	149
40-49 years	13	10	1	197	221
50-59 years	8	4	0	90	102
60-69 years	2	0	0	27	29
70-79 years	0	0	0	13	13
>=80 years	2	0	0	4	6
Total	320	53	10	1352	1735

2005					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	37	0	11	0	48
1-10 years	44	6	16	0	66
11-19 years	97	4	24	443	568
20-29 years	6	1	2	67	76
30-39 years	3	1	4	103	111
40-49 years	7	4	3	144	158
50-59 years	4	0	3	92	99
60-69 years	0	0	2	35	37
70-79 years	0	0	0	14	14
>=80 years	0	0	0	6	6
Total	198	16	65	904	1183

2006					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	29	0	32	0	61
1-10 years	39	3	48	2	92
11-19 years	92	7	60	435	594
20-29 years	9	3	9	67	88
30-39 years	4	5	6	84	99
40-49 years	6	9	9	118	142
50-59 years	6	1	8	64	79
60-69 years	5	0	2	18	25
70-79 years	0	0	2	10	12
>=80 years	0	1	1	6	8
Unk years	0	0	0	1	1
Total	190	29	177	805	1201

2007					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	35	0	46	0	81
1-10 years	79	8	102	5	194
11-19 years	42	0	57	347	446
20-29 years	4	2	7	68	81
30-39 years	3	1	7	87	98
40-49 years	10	2	12	146	170
50-59 years	8	0	6	67	81
60-69 years	2	0	3	24	29
70-79 years	0	0	2	8	10
>=80 years	1	0	1	6	8
Total	184	13	243	758	1198

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**Confirmed Pertussis Case Counts by Diagnostic Method, Age Group and Year in Massachusetts:
2000-2010***

*These data are current as of 11/16/2011 and are subject to change.

2008					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	32	0	18	0	50
1-10 years	57	3	69	3	132
11-19 years	29	3	20	169	221
20-29 years	5	0	4	52	61
30-39 years	3	2	4	56	65
40-49 years	5	2	6	97	110
50-59 years	5	1	1	72	79
60-69 years	0	0	0	26	26
70-79 years	1	0	2	12	15
>=80 years	0	0	1	2	3
Total	137	11	125	489	762

2009					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	22	0	16	0	38
1-10 years	32	3	11	5	51
11-19 years	13	0	6	57	76
20-29 years	0	0	1	17	18
30-39 years	1	0	1	50	52
40-49 years	6	0	4	52	62
50-59 years	2	0	2	36	40
60-69 years	2	0	0	15	17
70-79 years	0	0	0	7	7
>=80 years	0	0	0	1	1
Total	78	3	41	240	362

2010					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	14	0	10	0	24
1-10 years	40	1	21	0	62
11-19 years	21	0	11	41	73
20-29 years	2	0	0	22	24
30-39 years	5	0	3	18	26
40-49 years	5	1	4	34	44
50-59 years	2	0	0	16	18
60-69 years	0	0	0	18	18
70-79 years	0	0	0	6	6
>=80 years	0	0	0	1	1
Total	89	2	49	156	296

**Massachusetts Department of Public Health
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**Confirmed Pertussis Hospitalizations by Age Group and Year in Massachusetts:
2000-2010***

*These data are current as of 11/16/2011 and are subject to change.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<1 year	29	7	13	20	47	32	37	47	35	30	18
1-10 years	2	0	0	2	1	1	0	3	4	2	1
11-19 years	4	0	0	8	3	3	4	2	0	0	0
20-29 years	1	2	0	2	4	0	1	2	1	0	0
30-39 years	4	0	1	1	4	3	2	1	2	1	2
40-49 years	3	0	0	1	5	4	5	6	3	5	3
50-59 years	3	1	0	3	3	5	2	3	5	2	1
60-69 years	1	0	0	3	4	2	0	0	1	1	0
70-79 years	1	0	0	1	1	0	2	1	3	1	1
>=80 years	1	0	0	2	2	0	1	0	1	0	0
Unk years	0	0	0	0	0	0	0	0	0	0	0
Total	49	10	14	43	74	50	54	65	55	42	26

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Confirmed Pertussis Case Counts by Age Group and Year in Massachusetts: 2000-2010*

*These data are current as of 12/01/2011 and are subject to change.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<1 year	52	13	22	41	71	48	61	81	50	38	24
1-6 years	24	8	16	44	43	39	39	75	47	17	20
7-10 years	29	13	16	18	24	27	53	119	85	34	42
11-19 years	872	339	380	1080	932	568	594	446	221	76	73
20+ years	405	183	190	494	665	501	453	477	359	197	137
Unknown	0	0	0	0	0	0	1	0	0	0	0
Total	1382	556	624	1677	1735	1183	1201	1198	762	362	296

**Percentage of Confirmed Pertussis Case Counts by Age Group and Year in Massachusetts:
2000-2010***

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<1 year	3.76%	2.34%	3.53%	2.44%	4.09%	4.06%	5.08%	6.76%	6.56%	10.50%	8.11%
1-6 years	1.74%	1.44%	2.56%	2.62%	2.48%	3.30%	3.25%	6.26%	6.17%	4.70%	6.76%
7-10 years	2.10%	2.34%	2.56%	1.07%	1.38%	2.28%	4.41%	9.93%	11.15%	9.39%	14.19%
11-19 years	63.10%	60.97%	60.90%	64.40%	53.72%	48.01%	49.46%	37.23%	29.00%	20.99%	24.66%
20+ years	29.31%	32.91%	30.45%	29.46%	38.33%	42.35%	37.72%	39.82%	47.11%	54.42%	46.28%
Unknown	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.00%	0.00%	0.00%	0.00%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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**Massachusetts' Confirmed Pertussis Incidence Rates (per 100,000 population^) by Age Group and
Year: 2000-2010***

*These data are current as of 12/01/2011 and are subject to change.

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<1 year	77,998	66.7	16.7	28.2	52.6	91.0	61.5	78.2	103.8	64.1	48.7	30.8
1-6 years	486,249	4.9	1.6	3.3	9.0	8.8	8.0	8.0	15.4	9.7	3.5	4.1
7-10 years	354,588	8.2	3.7	4.5	5.1	6.8	7.6	14.9	33.6	24.0	9.6	11.8
11-19 years	756,278	115.3	44.8	50.2	142.8	123.2	75.1	78.5	59.0	29.2	10.0	9.7
20+ years	4,673,984	8.7	3.9	4.1	10.6	14.2	10.7	9.7	10.2	7.7	4.2	2.9
Total	6,349,097	21.8	8.8	9.8	26.4	27.3	18.6	18.9	18.9	12.0	5.7	4.7

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Confirmed Pertussis Case Counts by Diagnostic Method, Age Group and Year in Massachusetts:

*These data are current as of 11/25/2011 and are subject to change.

2000					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	47	5	0	0	52
1-6 years	16	7	0	1	24
7-10 years	17	11	0	1	29
11-19 years	125	24	3	720	872
20+ years	17	9	1	378	405
Total	222	56	4	1100	1382

2001					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	13	0	0	0	13
1-6 years	4	4	0	0	8
7-10 years	5	7	0	1	13
11-19 years	32	8	1	298	339
20+ years	9	4	2	168	183
Total	63	23	3	467	556

2002					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	18	3	1	0	22
1-6 years	8	8	0	0	16
7-10 years	3	10	0	3	16
11-19 years	47	23	4	306	380
20+ years	16	14	3	157	190
Total	92	58	8	466	624

2003					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	32	7	2	0	41
1-6 years	28	15	1	0	44
7-10 years	7	7	0	4	18
11-19 years	131	35	3	911	1080
20+ years	15	40	0	439	494
Total	213	104	6	1354	1677

2004					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	65	2	4	0	71
1-6 years	32	9	1	1	43
7-10 years	13	9	0	2	24
11-19 years	156	12	3	761	932
20+ years	54	21	2	588	665
Total	320	53	10	1352	1735

2005					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	37	0	11	0	48
1-6 years	26	2	11	0	39
7-10 years	18	4	5	0	27
11-19 years	97	4	24	443	568
20+ years	20	6	14	461	501
Total	198	16	65	904	1183

2006					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	29	0	32	0	61
1-6 years	16	0	23	0	39
7-10 years	23	3	25	2	53
11-19 years	92	7	60	435	594
20+ years	30	19	37	367	453
Unk years	0	0	0	1	1
Total	190	29	177	805	1201

2007					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	35	0	46	0	81
1-6 years	34	0	41	0	75
7-10 years	45	8	61	5	119
11-19 years	42	0	57	347	446
20+ years	28	5	38	406	477
Total	184	13	243	758	1198

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Confirmed Pertussis Case Counts by Diagnostic Method, Age Group and Year in Massachusetts:

*These data are current as of 11/25/2011 and are subject to change.

2008					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	32	0	18	0	50
1-6 years	19	2	26	0	47
7-10 years	38	1	43	3	85
11-19 years	29	3	20	169	221
20+ years	19	5	18	317	359
Total	137	11	125	489	762

2009					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	22	0	16	0	38
1-6 years	13	1	3	0	17
7-10 years	19	2	8	5	34
11-19 years	13	0	6	57	76
20+ years	11	0	8	178	197
Total	78	3	41	240	362

2010					
	Diagnostic Method				Total
	Culture	Epi-linked	PCR	Serology	
<1 years	14	0	10	0	24
1-6 years	12	0	8	0	20
7-10 years	28	1	13	0	42
11-19 years	21	0	11	41	73
20+ years	14	1	7	115	137
Total	89	2	49	156	296

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**Confirmed Pertussis Hospitalizations by Age Group and Year in Massachusetts:
2000-2010***

*These data are current as of 11/25/2011 and are subject to change.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<1 year	29	7	13	20	47	32	37	47	35	30	18
1-6 years	2	0	0	1	1	1	0	1	4	2	1
7-10 years	0	0	0	1	0	0	0	2	0	0	0
11-19 years	4	0	0	8	3	3	4	2	0	0	0
20+ years	14	3	1	13	23	14	13	13	16	10	7
Unknown	0	0	0	0	0	0	0	0	0	0	0
Total	49	10	14	43	74	50	54	65	55	42	26